

In the Claims:

Please cancel claim 21, and amend claim 22 as shown below. Applicant reserves the right to prosecute any canceled or originally presented claims in a continuing or future application.

1. (Previously Presented) A light source comprising:
a substrate and a phosphor material that has a waveguide formed therein, the waveguide having a substantially planar shape and further having a waveguide direction along a longitudinal dimension and an exit region at an end of the longitudinal dimension; and
an excitation source that applies excitation energy to the waveguide in a direction substantially sheer or perpendicular to the plane of the waveguide such that light is generated within the phosphor material in a direction within or parallel to the waveguide direction, and exits through the exit region.
2. (Previously Presented) The light source of claim 1 wherein said waveguide is comprised of a spiral.
3. (Previously Presented) The light source of claim 1 wherein the waveguide is comprised of multiple spirals configured about the same center.
4. (Previously Presented) The light source of claim 1 wherein said waveguide has a small cross-section in relationship to a large longitudinal dimension.
5. (Previously Presented) The light source of claim 1 wherein said excitation source is an electron beam.
6. (Previously Presented) The light source of claim 1 wherein said excitation source is light.
7. (Previously Presented) The light source of claim 1 wherein said excitation source is an alternating electric field.
8. (Previously Presented) The light source of claim 1 wherein said waveguide is constructed to control the spontaneous emission rate of the phosphor in the phosphor region.

9. (Previously Presented) The light source of claim 1 wherein the one of the dimensions of the waveguide is on the order of a wavelength of light.
10. (Previously Presented) The light source of claim 1 wherein mirrors are placed on one or more sides of the waveguide.
11. (Previously Presented) The light source of claim 10 wherein said mirrors are comprised of aluminum.
12. (Previously Presented) The light source of claim 10 wherein said mirrors are comprised of alternating layers of materials with different indices of refraction.
13. (Previously Presented) The light source of claim 1 including another waveguide associated with the waveguide with the phosphor film.
14. (Previously Presented) The light source of claim 1 including a multiplicity of waveguides, each forming a pixel at the exit region.
15. Canceled.
16. (Previously Presented) A light source comprising:
a phosphor film which has a substantially planar shape, and both a long dimension and a small cross-section, the phosphor film having at least one waveguide mode in the long dimension; and
an excitation source that directs excitation energy at the phosphor film in a direction substantially sheer or perpendicular to the direction of the long dimension such that light is generated in a waveguide mode within the long dimension and exits an exit region at the end of the long dimension.
17. (Previously Presented) The light source of claim 1 including at least one of a light on ramp and a light off ramp associated with the waveguide.

18. Canceled.

19. (Previously Presented) The light source of claim 16 including at least one of a light on ramp and a light off ramp associated with the phosphor film

20. (Previously Presented) The light source of claim 16 wherein the waveguide is comprised of a spiral.

21. Canceled.

22. (Presently Amended) A light source comprising:

a waveguide substrate having two dimensions on the order of a wavelength of emitted light, and a third dimension sufficiently long to produce a surface area on the order of many square centimeters;

a phosphor film disposed on the waveguide substrate and having a waveguide direction parallel to the third dimension, the phosphor film having a guided mode such that excitation energy received by the phosphor film in a direction substantially sheer or perpendicular to the waveguide direction generates light in the phosphor film that travels in the phosphor film in the waveguide direction and exits through an exit region along the waveguide direction; and

[The light source of claim 21] said light source further including at least one of a light on ramp and a light off ramp associated with the phosphor film.